

REMARKS/ARGUMENTS

In the specification, amendments have been made to correct typographic errors on page 3.

Claims 1-12 are now pending and under examination. Applicant has amended claims 1, 6 and 8. No new matter has been added.

The amendment to claim 1 is supported by Example a of the specification.

Rejection under 35 U.S.C. §112, first paragraph

Claim 12 was rejected under 35 U.S.C. §112, first paragraph, on the ground that the specification fails to adequately disclose the method of joining the filter media together by surface pressure during folding. Applicant respectfully traverses the rejection because the subject matter of claim 12 is disclosed by the specification (see, for example, the first full paragraph on page 6). This paragraph states that the layers of filter media can be joined by applying surface pressure during the folding process before or during folding, for example on an embossing and folding machine. In other words, the surfaces of the filter media are compressed against each other under pressure during the embossing and/or folding process, and this surface pressure can be used to join the layers of the filter media. Applicant believes that a person with ordinary skill in the art can practice the invention defined by claim 12 based on the specification's disclosure and in accordance with the established practice in the art without undue experimentation. If the Examiner considers it necessary, Applicant is prepared to submit a §131 affidavit to that effect.

Rejection under 35 U.S.C. §112, second paragraph

Claims 4, 6-9 and 12 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Regarding "the inflow side" limitation of claim 4, Applicant disagrees with the Examiner and respectfully points out that the antecedent basis is provided in claim 1.

With regard to "the center layer" limitation of claims 6 and 8, Applicant has amended claims 6 and 8 to correct the antecedent problems.

With regard to "the outflow side" limitation of claim 10, the antecedent basis is now provided in claim 1.

Regarding claim 12, in view of the above discussion on the rejection under 35 U.S.C. §112, first paragraph, Applicant respectfully submits that the filter layers "joined together by surface pressure" are structurally different from those joined using the other methods taught by the present invention, namely welding and the use of an adhesive. One of the differences is that the fibers of different filter layers joined by surface pressure are not integrally connected to each other, while the fibers of filter layers joined using the other disclosed methods are integrally connected to each other, i.e. integrally welded to each other or integrally glued to each other.

Rejections under 35 U.S.C. §§ 102 and 103(a)

Claims 1-3, 5, 6, 8 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Chilton (U.S. Patent 5,716,522). Claims 1-3, 11 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Okumura (U.S. Patent 4,948,515). Claims 4, 7 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Chilton. Claims 5-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Okumura in view of Chilton. For the following reasons, Applicant respectfully requests reconsideration and withdrawal of the rejections.

Applicant respectfully submits that there are several differences between the claimed invention and the cited art. For example, the claimed invention uses polyester meltblown web only on the inflow side but not on the outflow side, while the filter layers described in the primary references (i.e. Chilton and Okumura) use meltblown filter media on the outflow side.

For example, Chilton describes a meltblown layer (58) on the outflow side of the filter layer according to Figure 4. An disadvantage of a meltblown layer on the outflow side is that a meltblown layer has a very fluffy texture and fiber particles will become loose during manufacturing and during fluid flow. During the manufacturing of the filter element, loose fibers must be removed with difficulty, resulting in time delays. To prevent fiber particles from getting into the clean oil stream, Chilton provides a spun bond around the entire filter pack. This, however, increases the costs and complexity of the manufacturing process.

Okamura also describes a meltblown filter layer on the outflow side of the filter element and thus has the same disadvantages. Additionally, the filter element of Okumura is pleated. The problem in pleating such a filter element is that the very fine, cottony texture of the meltblown layer clogs the folding machines and/or the particles become loose, resulting in production problems.

The advantage of the presently claimed invention is that the pleating of the filter layers is easier because the meltblown is on the inflow layer. Thus there is no danger that the filter fibers will become loose during pleating or even during the filtration process.

In view of the above discussion, claim 1, as well as the dependent claims, have features that are not taught or suggested by the cited references. Accordingly, the claims are patentable over the cited references.

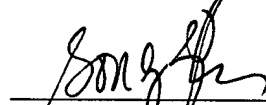
In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Application No. 09/982,527
Reply dated October 1, 2003
Response to Office Action dated April 1, 2003

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (CAM #: 037141.50504US).

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Respectfully submitted,



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